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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,812	01/21/2005	Michael Hawkes	1483-31	3775

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EXAMINER

HANNIF ALI, LARRY

ART UNIT PAPER NUMBER

2617

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/521,812	HAWKES, MICHAEL	
	Examiner	Art Unit	
	Larry Hannif-Ali	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 9, 11-19, 21-27 and 30-32 is/are rejected.
- 7) ☒ Claim(s) 7, 10, 20, 28 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07-08-2005, 01-21-2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1** is rejected under 35 U.S.C. 102(b) as being unpatentable over Turcotte (Patent No. 5,930,239).

Regarding **Claim 1**. Turcotte teaches a mobile terminal adapted to receive a message via a mobile communications network [Col 3, lines 65-67 & Col 4, lines 1-6]; request authentication data from the user of said mobile terminal; and transmit said authentication data to an authentication system for authenticating the user of said mobile terminal [Col 4, lines 7-11 & Col 5, lines 39-47 & Col 3, lines 34-44 (inherently, the password will be verified through the system Home Location Register)].

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3. **Claims 3-4** are rejected under 35 U.S.C. 102(e) as being unpatentable over Allison (U.S. Pub. No. 2003/0083078 A1).

Regarding **Claim 3**. Allison teaches an authentication system for transmitting information, said authentication system storing identification information of a plurality of providing users and a plurality of receiving users and being adapted to receive information from at least one of said providing users [paragraph 0048 (MDM: message discrimination module) & paragraph 0049]; authenticate said at least one providing user [paragraph 0049 (sending or calling party identification field)]; and transmit a message including said information via a mobile communications network to a receiving user's mobile terminal [paragraph 0053].

Regarding **Claim 4**. Allison further teaches being adapted to authenticate a receiving user as the recipient of said information [paragraph 0049 (receiving or called party identification field)].

4. **Claim 11** is rejected under 35 U.S.C. 102(e) as being unpatentable over Byers (U.S. Patent No. 6,928,290 B2).

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Regarding **Claim 11**. Byers teaches a method of transmitting a message via a mobile telecommunications network from a sender's device to a user's terminal, wherein the user is required to acknowledge receipt of said message in a predetermined way and an acknowledgement message is subsequently transmitted to the sender of said message [Col 2, lines 49-61 & Col 3, lines 44-59].

5. **Claim 30-31** is rejected under 35 U.S.C. 102(e) as being unpatentable over Arnold (U.S. Patent No. 6,842,628 B1).

Regarding **Claim 30**. Arnold teaches a method of transmitting a text message via a mobile communications network, wherein a portion of said text message is encrypted using a private/public key pair, wherein said public key is valid only for a predetermined number of text messages [Col 8, lines 19-26 (public key is only transmitted once)].

Regarding **Claim 31**. Arnold further teaches wherein said public key is transmitted in said text message [Col 8, lines 19-26].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Allison (U.S. Pub. No. 2003/0083078 A1) in view of Arnold (U.S. Patent No. 6,842,628 B1).

Regarding **Claim 5**. Allison teaches everything as applied above in Claim 3. However, Allison fails to specifically teach further being adapted to provide a public/private key pair valid only for a single communication between the authentication system and said receiving user, wherein said communication comprises a message and/or a response to said message encrypt at least part of said message using said public/private key pair; and to send said public key to said receiving user as part of said message. The examiner considers that the claimed limitation was well known in the art as taught by Arnold.

In an analogous art, Arnold discloses a method for transmitting verified notification messages from a service provider adapted to provide a public/private key pair valid only for a single communication between the authentication system and said receiving user [Col 7, lines 50-53 (public key is transmitted only once)], wherein said communication comprises a message and/or a response to said message [Col 8, lines 7-13]; encrypt at least part of said message using said public/private key pair; and to send said public key to said receiving user as part of said message [Col 8, lines 19-26].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the system of Allison, the public/private key pair as taught by Arnold, in order to transmit messages in a secure manner.

8. **Claims 8-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Allison (U.S. Pub. No. 2003/0083078 A1) in view of Byers (U.S. Patent No. 6,928,290 B2).

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Regarding **Claim 8**. Allison teaches everything as applied above in Claim 3. However, Allison fails to specifically teach further being adapted to receive an acknowledgement message or a response message from said receiving user. The examiner considers that the claimed limitation was well known in the art as taught by Byers.

In an analogous art, Byers discloses a method and apparatus for confirmation of short message service delivery further being adapted to receive an acknowledgement message or a response message from said receiving user [Col 3, lines 44-59 (ACK message)].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the system of Allison, the delivery acknowledgement message as taught by Byers in order for the receiver to verify receipt of the short message.

Regarding **Claim 9**. The combination of Allison and Byers further teaches further being adapted to transmit a confirmation message to said one providing user based upon said acknowledgement or response message [Byers: Col 3, lines 44-59 (delivery acknowledgement)].

9. **Claims 2, 12-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Turcotte (Patent No. 5,930,239) in view of Byers (U.S. Patent No. 6,928,290 B2).

Regarding **Claim 2**. Turcotte teaches everything as applied above in Claim 1. However, Turcotte fails to specifically teach further being adapted to automatically generate an acknowledgment message to the sender of said message. The examiner considers that the claimed limitation was well known in the art as taught by.

In an analogous art, Byers discloses a method and apparatus for network-assisted automatic confirmation of short message service delivery further being

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adapted to automatically generate an acknowledgment message to the sender of said message [Col 2, lines 49-61 & Col 3, lines 44-59].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the system of Turcotte to include the automatic acknowledgement to the sender of message, in order for the sender to know if delivery of the message was successful or unsuccessful.

Regarding **Claim 12**. Byers teaches everything as applied above in Claim 11. However, Byers fails to specifically teach wherein said user is required to authenticate himself by providing authentication data. The examiner considers that the claimed limitation was well known in the art as taught by Turcotte.

In an analogous art, Turcotte discloses a message transmission system wherein said user is required to authenticate himself by providing authentication data [Col 4, lines 7-11 & Col 5, lines 39-47].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the system of Byers to include the authentication process of Turcotte to ensure the message being delivered to the intended recipient.

Regarding **Claim 13**. The combination of Byers and Turcotte further teaches wherein said user's terminal automatically generates said acknowledgement message upon supply of said authentication data and/or response data [Byers: Col 3, lines 44-59].

Regarding **Claim 14**. The combination of Byers and Turcotte further teaches wherein a central authentication system verifies the user's authentication [Turcotte: Col 4, lines 7-11 & Col 5, lines 39-47].

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10. **Claims 15-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Byers (U.S. Patent No. 6,928,290 B2) in view of Turcotte (Patent No. 5,930,239).

Regarding **Claim 15**. Byers teaches everything as applied above in Claim 11. However, Byers fails to specifically teach wherein said message or a portion thereof is only displayed to the receiving user if the receiving user provides a valid authentication. The examiner considers that the claimed limitation was well known in the art as taught by Turcotte.

In an analogous art, Turcotte discloses a message transmission system wherein said user is required to authenticate himself by providing authentication data [Col 4, lines 7-11 & Col 5, lines 39-47].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the system of Byers to include the authentication process of Turcotte to ensure the message being delivered to the intended recipient.

Regarding **Claim 16**. The combination of Byers and Turcotte further teaches wherein said message is a SMS message according to the GSM standard [Turcotte: Col 2, lines 66-67 & Col 3, line 1 & Col 4, lines 7-11].

11. **Claims 17-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Byers (U.S. Patent No. 6,928,290 B2) in view of Arnold (U.S. Patent No. 6,842,628 B1).

Regarding **Claim 17**. Byers teaches everything as applied above in Claim 11. However, Byers fails to specifically teach wherein at least a portion of the text message is encrypted by the sender's device before transmission and decrypted by the receiving terminal before display. The examiner considers that the claimed limitation was well known in the art as taught by Arnold.

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In an analogous art, Arnold discloses a method for transmitting verified notification messages wherein at least a portion of the text message is encrypted by the sender's device before transmission and decrypted by the receiving terminal before display [Col 8, lines 19-26].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the system of Byers the encryption and decryption as taught by Arnold in order to transmit messages in a secure manner.

Regarding **Claim 18**. The combination of Byers and Arnold further teaches wherein the text message comprises a first portion including the body of said message and a second portion containing encryption data used for encryption of said body and required for decryption of data included in said body [Arnold: Col 8, lines 19-26].

Regarding **Claim 19**. The combination of Byers and Arnold further teaches wherein wherein said second portion is unencrypted [Arnold: Col 8, lines 19-26 (inherently, the second portion is the public key known to the sender and recipient)].

Regarding **Claim 21**. The combination of Byers and Arnold further teaches wherein said encryption data are valid only for a single communication between the sender and the receiving user [Arnold: Col 8, lines 19-26 (public key is transmitted only once with text message)], said communication comprising said message and a response to said message [Byers: Col 3, lines 44-59].

Regarding **Claim 22**. The combination of Byers and Arnold further teaches wherein said encryption requires further encryption data stored in the sender's device [Arnold: Col 7, lines 54-56].

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Regarding **Claim 23**. The combination of Byers and Arnold further teaches wherein said decryption requires further encryption data stored in the receiving terminal [Arnold: Col 7, lines 54-56].

Regarding **Claim 25**. The combination of Byers and Arnold further teaches wherein authentication data are used for encryption and decryption of said portion of said message [Arnold: Col 7, lines 50-59 (inherently, authentication must be provided before encryption and decryption)].

Regarding **Claim 26**. The combination of Byers and Arnold further teaches wherein conventional short message protocols and software applications running on the communications devices are used to implement the method [Byers: Col 3, lines 15-30].

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allison (U.S. Pub. No. 2003/0083078 A1) in view of Arnold (U.S. Patent No. 6,842,628 B1) and further in view of Hinnant (U.S. Pub. No. 2002/0131592 A1).

Regarding **Claim 7**. Allison teaches everything as applied above in Claim 3. However, Allison fails to specifically teach further being adapted to provide a public/private key pair valid only for a single communication between the authentication system and said receiving user, wherein said communication comprises a message and/or a response to said message encrypt at least part of said message using said public/private key pair; and to send said public key to said receiving user as part of said message. The examiner considers that the claimed limitation was well known in the art as taught by Arnold.

In an analogous art, Arnold discloses a method for transmitting verified notification messages from a service provider adapted to provide a public/private key pair valid only for a single communication between the authentication system and said receiving user [Col 7, lines 50-53 (public key is transmitted only once)],

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wherein said communication comprises a message and/or a response to said message [Col 8, lines 7-13]; encrypt at least part of said message using said public/private key pair; and to send said public key to said receiving user as part of said message [Col 8, lines 19-26].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the system of Allison, the public/private key pair as taught by Arnold, in order to transmit messages in a secure manner.

The combination of Allison and Arnold teaches everything as above. However, the combination fails to specifically teach sending said public key to said receiving user terminal prior to said communication and store said public key in said mobile device. The examiner considers that the claimed limitation was well known in the art as taught by Hinnant.

In an analogous art, Hinnant discloses a system and method for secure communication in a mobile environment by sending said public key to said receiving user terminal prior to said communication and store said public key in said mobile terminal [paragraph 0031, lines 1-8].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the combination of Allison and Arnold, the method of transmitting the public key prior to transmitting the message as taught by Hinnant in order to have added security for transmitting messages.

12. **Claim 32** is rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold (U.S. Patent No. 6,842,628 B1) in view of Hinnant (U.S. Pub. No. 2002/0131592 A1).

Regarding **Claim 32**, Arnold teaches everything as applied above in Claim 30. However, Arnold fails to specifically teach wherein said public key is transmitted in a text message, which is transmitted prior to said text message. The examiner

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considers that the claimed limitation was well known in the art as taught by Hinnant.

In an analogous art, Hinnant discloses a system and method for secure communication in a mobile environment wherein said public key is transmitted in a text message, which is transmitted prior to said text message [paragraph 0031, lines 1-8 (inherently, the key may be transmitted using a text message)].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the system of Arnold, the method or transmitting the public key prior to transmitting the message as taught by Hinnant in order to have added security for transmitting messages.

13. **Claim 24** is rejected under 35 U.S.C. 103(a) as being unpatentable over Byers (U.S. Patent No. 6,928,290 B2) in view of Kynast (U.S. Pub. No. 2003/0100292 A1).

Regarding **Claim 24**, Byers teaches everything as applied above in Claim 11. However, Byers fails to specifically teach wherein at least a portion of said message and/or response message to said message is automatically deleted after a predetermined time period from said mobile terminal. The examiner considers that the claimed limitation was well known in the art as taught by Kynast.

In an analogous art, Kynast discloses method and device for managing mobile telephone messages wherein at least a portion of said message and/or response message to said message is automatically deleted after a predetermined time period from said mobile terminal [paragraph 0016 & paragraph 0018, lines 8-13 & paragraph 0019].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the system of Byers to include the validity criterion for storing short messages in a mobile device in order to use the memory of the mobile device resourcefully.

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14. **Claim 27** is rejected under 35 U.S.C. 103(a) as being unpatentable over Byers (U.S. Patent No. 6,928,290 B2) in view of Korpela (U.S. Patent No. 6,311,054 B1).

Byers teaches everything as applied above in Claim 11, including the sender's and receiver's mobile terminals. However, Byers fails to specifically teach wherein in said sender's device and in said receiving user's terminal a transaction reference counter is implemented and wherein each of said transaction reference counters is incremented if a message is successfully received. The examiner considers that the claimed limitation was well known in the art as taught by Korpela.

In an analogous art, Korpela discloses a method for determining charging information in a mobile station wherein said sender's device and in said receiving user's terminal a transaction reference counter is implemented and wherein each of said transaction reference counters is incremented if a message is successfully received [Col 3, lines 19-32].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify, the system of Byers to include the incrementing signal and counter as taught by Korpela in the sender's device and receiving user's terminal in order to verify a successfully transmitted message.

Allowable Subject Matter

15. **Claims 7, 10, 20, and 28-29** objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding **Claim 7**. The prior art of record does not disclose or suggest an authentication system according to claim 3, further being adapted to extract a

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public key specific to said receiving user from said stored identification information and to use said further public key for encryption of said at least part of said message.

Claims 10, 20, and 28-29 are objected to for the same reason.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry Hannif-Ali whose telephone number is 571-272-5598. The examiner can normally be reached on Mon-Fri 9:00AM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Larry Hannif-Ali

May 1, 2006



LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER